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ABSTRACT

Listed are 246 curriculum material items in ten categories: field crops, horticulture, forestry, animal science, soils, diseases and pests, agricultural engineering, agricultural economics, agricultural occupations, and professional. Most materials are annotated and all are classified according to the AGPEX filing system. Bibliographic and ordering information are provided. Criteria for selection in the listing are that the material be developed by and used for those in vocational education in agriculture, that it be developed in the last year and not be distributed commercially, that it be of use beyond the State preparing it, and that it be available from its source and/or through ERIC. (SC)

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# A DESCRIPTION AND SOURCE LISTING OF CURRICULUM MATERIALS IN AGRICULTURAL EDUCATION

**Developed and published by the Curriculum Materials Committee of the Agricultural Education Division of the A.V.A.**

**1972-1973**

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## FOREWORD

The publication "A Description and Source Listing of Curriculum Materials in Agricultural Education" is published annually by the Curriculum Materials Committee of the Agricultural Education Division of the American Vocational Association. The purpose of the publication is to inform teachers of vocational agriculture, agricultural supervisors, agricultural teacher educators, and other interested persons of current agricultural curriculum materials that are available to them.

The Curriculum Materials Committee collects information concerning available curriculum materials prior to the annual A.V.A. convention. The materials are classified by the committee for the "Source Listing." The criteria used for selecting the information are as follows:

a. The material has been developed by persons engaged in vocational education in agriculture for use primarily in that field.

b. The material has been developed during the past year or is current information that has not previously been listed in the "Source Listing."

c. The material is not being distributed commercially.

d. The material would be of interest and use beyond the boundary of the state in which it is being prepared.

e. The material will be available from its source and/or may be available through the ERIC System.

Some of the materials announced in this "Source Listing" have been included in Abstracts of Instructional Materials in Vocational and Technical Education (AIM). Many of the other items will appear in future issues of AIM.

The materials are classified according to the AGDEX filing system which has been revised by the Curriculum Materials Committee. The AGDEX system is the basis of the organization of this "Source Listing."

If you wish to order items described in this publication, please write direct to the source listed. There is no single source from which all materials can be ordered.

It is the wishes of the Committee that this "Source Listing" will prove useful to you in obtaining up-to-date information.

Harlan E. Ridenour, Chairman
Curriculum Materials Committee
Agricultural Education Division
American Vocational Association

# A DESCRIPTION AND SOURCE LISTING

# OF

# CURRICULUM MATERIALS

# IN

# AGRICULTURAL EDUCATION

# 1972-1973

Prepared by


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## AGDEX 100 FIELD CROPS

1. CROP PRODUCTION (Student Study Guide). 1971. AGDEX 100. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in a specialized study of crop production. Price: $1.00. Available in limited quantity from source in single copy only.

2. A LABORATORY MANUAL FOR AGRICULTURAL TEACHERS. 1972. AGDEX 100. W. H. Hamilton. Source: Agricultural Education Section, Purdue University, Lafayette, Indiana 47907. A series of laboratory exercises for agricultural students giving objectives, materials required, procedures, and observation guides. Topics included are entomology, seed treatment, plant growth, germination, soils, fertilizer placement, etc. Price: Free. Available in limited quantity from source.

3. SOME IDENTIFYING CHARACTERISTICS OF 60 CROP AND WEED SEEDS. 1972. AGDEX 100/40. Clarence R. Fridline. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Rd., Columbus, Ohio 43210. A brief description and illustration of the seeds included in the Ohio agronomy contest. The publication is designed for student use. Price: $.80. Available in quantity from source. Copy submitted to ERIC system.

4. SEED PRODUCTION OF CORN, SOYBEANS, AND SMALL GRAINS. 1972. AGDEX 100/40. Clarence R. Fridline. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of 70 color slides and illustrated script designed to accompany the student reference of the same title. Price: $12.50. Available in quantity from source. Copy submitted to ERIC system.

5. APPROVED PRACTICES FOR CORN PRODUCTION, Vol. 13, No. 8s. 1972. AGDEX 111. Robert Barr and William Williams. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennslyvania 16802. Price: $.25. Available in quantity from source.

6. PROFITABLE CORN PRODUCTION--A SOURCE UNIT FOR PROGRAMS IN AGRICULTURAL OCCUPATIONS. Revised 1972. AGDEX 111. R. L. Courson and P. E. Hemp. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 32-page publication gives suggestions and lists teaching aids on corn production. It contains anticipated problems, suggested activities, and references that you may want to incorporate into your teaching plan. A subject - matter packet containing many of the references listed is also available. Price: $.40 postpaid when payment accompanies the order. Available in quantity from source.

7. PLANTING CORN (Slidefilm 731A). Revised 1972. AGDEX 111/20. R. L. Courson and C. K. Darrow. Source: Vocational Agricultural Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 70 frames. It discusses some of the following: when to plant; row width; distance between plants; depth of planting; and recommended herbicide and insecticide application. Price: $3.85 postpaid when payment accompanies the order. Available in quantity from source.

8. TILLAGE SYSTEMS FOR CORN. 1972. AGDEX 111/510. Clarence R. Fridline and Samuel W. Bone. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of 70 color slides and illustrated script dealing with the agronomic and economic aspects of commonly used tillage systems for corn. Price: $12.50. Available in quantity from source. Copy submitted to ERIC system.

9. APPROVED PRACTICES FOR OATS. Revised 1972. AGDEX 113. R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a 4-page publication which lists specific practices followed by successful producers. It can be used by students carrying out their supervised experience program involving oat production. Price: $.05 per copy when payment accompanies the order. Available in quantity from source.

10. APPROVED PRACTICES IN FORAGE CROPS, Vol. 13, No. 9s. 1972. AGDEX 120. Robert Barr and William Williams. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $.25. Available in quantity from source.

11. HAY PRODUCTION, HS-18. 1971. AGDEX 120/20. Wilson Glenn Collins. Source: Curriculum Development Center, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives, transparency masters, and content for teacher use in developing lesson plans in the Hay Production area. Price: Not for sale. One copy free on request for State Directors of Agricultural Education. Copy submitted to ERIC system. Not available from source.

12. APPROVED PRACTICES FOR ALFALFA. Revised 1972. AGDEX 121. R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a 4-page publication which can be used by students in planning and carrying out their supervised experience program involving alfalfa production. A few of the major headings are: Testing the Soil and Applying Fertilizer; Selecting Seed; Planting; Controlling Diseases and Insects; and Harvesting. Price: $.05 per copy when payment accompanies the order. Available in quantity from source.

13. A TEACHER'S GUIDE ON MODERN SOYBEAN PRODUCTION. Revised 1972. AGDEX 141. David L. Williams and Roger L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 28-page publication contains suggestions and teaching ideas on soybean production which instructors may want to use in developing their own teaching plans. It contains anticipated problems, suggested activities, and references for 12 problem areas. Price: $.35 postpaid when payment accompanies the order. Available in quantity from source.

## AGDEX 200 HORTICULTURE

14. AN EDUCATORS GUIDE TO SELECTED ARBORETA AND BOTANICAL GARDENS OF THE NORTHEAST. 1972. AGDEX 200. Steven Frowine and Kenneth Hance. Source: Instructional Materials Service, 201 Stone Hall, Cornell University, Ithaca, New York 14850. A 25-page manual that lists Botanical Gardens and Arboreta in the Northeast and describes the facilities and educational opportunities at each location. A particularly good guide for an instructor as he prepares for a field trip. Price: $2.00. Available in quantity from source.

15. STRAWBERRY PRODUCTION, HS-28. 1972. AGDEX 232/20. Larry Alley (Edited and revised by Wilson Glenn Collins). Source: Curriculum Development Center, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives and content for teacher use in developing lesson plans in Strawberry Production. Price: Not for sale. One copy free on request for State Directors of Agricultural Education. Copy submitted to ERIC system. Not available from source.

A six-part series on Ornamental Horticulture which includes narration on reel tapes of cassettes and special set of ditto test masters for each filmstrip and one for series review. Six illustrated scripts are also included. 1972. AGDEX 270. Thomas Eltzroth and Steven C. LaMarine. Source: Vocational Education Productions, California Polytechnic State University, San Luis Obispo, California 93401. Price: Available as part of series of six selling for $40.00. Available in quantity from source.

16. LAWNS AND GROUND COVERS, LC No. 72-734064. Explains procedures for installing lawns and ground covers, including considerations to be made in choosing one over the other. All basic aspects of this skill are covered, so student could duplicate procedures if required.

17. CONTROLLING PESTS OF ORNAMENTAL PLANTS, LC No. 72-734065. Describes all basic categories of pests associated with ornamental plants, including insects, fungi, and weeds. Types of control for each type of pest are also controlled, with special emphasis on chemicals and their safe use.

18. FERTILIZING ORNAMENTAL PLANTS, LC No. 72-734066. Approaches plant nutrition from standpoint of soil analysis and proper fertilization techniques. Both organic and inorganic compounds are covered. Types of application equipment and rates of application are included.

19. PROPAGATING ORNAMENTAL PLANTS, LC No. 72-734067. Covers all basic methods of growing plants; i.e., seeds, grafting, division, layering. Mixtures of growing media for starting new plants, special containers used, and environmental conditions necessary are all included in the discussion.

20. GROWING MEDIA FOR ORNAMENTAL PLANTS, LC No. 72-734069. Describes various types of mineral and organic soil amendments, such as perlite, peat moss, vermiculite, and how these materials are used to improve soil conditions. Specific mixtures for various kinds of plants are included, also.

21. THE ELEMENTS OF PRUNING, LC No. 72-734070. Covers the common tools, basic techniques and the order in which they are performed, as well as circumstances under which they are usually necessary. Student should be able to perform skills after viewing.

22. ORNAMENTAL HORTICULTURE PLANT PROPAGATION: ASEXUAL AND SEXUAL REPRODUCTION, OH1. 1971. AGDEX 270/20. C. S. McLearen and L. H. Newcomb. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

23. LANDSCAPE DESIGN. 1972. AGDEX 272. E. Wesley Conner. Source: Vocational Education Productions, California Polytechnic State University, San Luis Obispo, California 93401. This handbook describes the necessary considerations to

be made in planning a home landscape, including types of plants, climate, topography and other factors. Useful for students and teachers. Price: $1.95.

24. STEPS TO A BETTER LAWN (slidefilm 651). 1972. AGDEX 273. A. J. Turgeon and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, 69-frame slidefilm. It is accompanied by a script or study guide. The following steps to a good lawn were discussed: (1) Select the right grass; (2) Follow the proper establishment; (3) Fertilize properly; (4) Mow properly; (5) Water properly; (6) Control weeds; (7) Control diseases; and (8) Control insects. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slide film with student study guide, $4.05; cassette tape narration of script, $3.00; additional copies of study guide, $.25 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

25. LANDSCAPING--DO'S AND DON'TS (Slidefilm 642). 1972. AGDEX 272. F. A. Giles and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 86 frames. It is accompanied by a script or study guide. It illustrates the various points you should consider when landscaping your home and points out possible planting materials to use. It also discusses planting procedure, care, and maintenance requirements. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $4.25; cassette tape narration of script, $3.00; additional copies of study guide, $.25 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

26. LAWN CARE AND MANAGEMENT. Revised 1972. AGDEX 273. Robert W. Miller. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of 46-color slides and illustrated script dealing with the following areas of lawn management: seed selection, seeding, fertilizing, mowing, weed control, disease control, watering, and thatch control. Price: $7.75. Available in quantity from source. Copy submitted to ERIC system.

27. LAWN WEEDS--IDENTIFICATION AND CONTROL (Slidefilm 650) 1972. AGDEX 273/640. A. L. Turgeon and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 39 frames. It is accompanied by a script or study guide. Identification of specific weeds in the lawn is the first step in determining appropriate methods for control. Herbicide recommendations are also given. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $3.05; cassette tape narration of script, $3.00; additional copies of study guide, $.20 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

28. GROUND COVERS AND THEIR USES (Slidefilm 646). 1972. AGDEX 274. F. A. Giles and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, 60-frame slidefilm. It is accompanied by a script or study guide. It discusses 51 different ground covers--giving planting suggestions, distance apart, and foliage color. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $3.75; cassette tape narration of script, $3.00; additional copies of study guide, $.25 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

29. TREES FOR LANDSCAPING, IDENTIFICATION, CULTURE, USE. Revised 1972. AGDEX 275. Craig S. Oliver. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. The publication is designed to provide a simple key for twenty trees commonly used for landscaping in Ohio. The trees included in the key were selected on the basis of their recommended use in Ohio. Price: $2.10. Available in quantity from source. Copy submitted to ERIC system.

30. PRUNING EVERGREENS (Slidefilm 643). 1972. AGDEX 275/24. F. A. Giles and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color slidefilm of 79 frames. It is accompanied by a script or study guide. It shows proper pruning procedures for (1) Arborvitae; (2) Yews; (3) Junipers; (4) Red Cedar; (5) Pines; (6) Spruces; and (7) Fir. Equipment needed is also shown. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $4.35; cassette tape narration of script, $3.00; additional copies of study guide, $.25 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

31. PRUNING FLOWERING TREES (Slidefilm 645). 1972. AGDEX 275/24. F. A. Giles and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, 46-frame slidefilm. It is accompanied by a script or study guide. It shows pruning procedure for crab apple, hawthorn, and redbud trees--before pruning, limbs to remove, tree after pruning, and the tree one to two years later in flower. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $3.30; cassette tape narration of script, $3.00; additional copies of study guide, $.20 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

32. FLOWERING SHRUBS. 1972. AGDEX 276. Karle Lucal. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of 84-color slides and illustrated script. This series of slides is not intended to be a complete compilation of all available flowering shrubs. Most of the plants shown are rather common with a few that are not used so often. The slides include the characteristics for identification such as leaf, flower, fruit, fall color (if worthy of mention), and the winter dormant bud. The series is designed to help the horticulture instructor in the classroom when actual plants are not available or out of season. Price: $14.00. Available in quantity from source. Copy submitted to ERIC system.

33. SHRUBS FOR LANDSCAPING, IDENTIFICATION, CULTURE, USE. Revised 1972. AGDEX 276. Craig S. Oliver. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. The publication is designed to provide a simple key for thirty-two shrubs commonly used for landscaping in Ohio. The shrubs included in the key have been selected on the basis of their recommended use in Ohio. Price: $2.55. Available in quantity from source. Copy submitted to ERIC system.

34. VIBURNUM. 1972. AGDEX 276. Karle Lucal. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of 48-color slides and illustrated script. The series shows fourteen of the some ninety plus species and varieties of the Viburnums which are grown in landscapes and are readily available in nurseries. An overall view of the plant is shown along with the flowers, fruit, and dormant winter twig. Price: $7.85. Available in quantity from source. Copy submitted to ERIC system.

35. PRUNING DECIDUOUS SHRUBS (Slidefilm 644). 1972. AGDEX 276/24. F. A. Giles and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color 45-frame slidefilm. It is accompanied by a script or study guide. It discusses rejuvenation and renewal pruning. It shows the plant before, after, and one to two years later. Price: Slidefilm with student study guide, $3.25; cassette tape narration of script, $3.00; additional copies of study guide, $.20 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

36. PROFESSIONAL FLOWER ARRANGING FOR BEGINNERS, LC No. 7288056. 1972. AGDEX 280/80. Robert L. Gordon. Source: Vocational Education Productions. California Polytechnic State University, San Luis Obispo, California 93401. A book with a number of full-color photographs, which explains the basic principles of flower arrangement. It is based on the content of a college course taught on television by the author. There are more than 125 illustrations in the 132 pages. Emphasis is on the Western Line Design school of flower arrangement, with reference also to Continental design and Ikebana. Price: Paperback, $4.95; hard-cover, $6.95.

37. PRACTICE SET FOR GARDEN FLOWERS, PART I (Slidefilm 601 Supp.). 1972. AGDEX 281. R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This color, single-frame slidefilm of 25 frames is a supplement to Slidefilm 601. It contains pictures of the same annual garden flowers without titles and is intended for practice in identification. A key to the correct identification is included at the end of the slidefilm. Price: $2.35 postpaid when payment accompanies the order. Available in quantity from source.

38. PRACTICE SET FOR GARDEN FLOWERS, PART II (Slidefilm 602 Supp.). 1972. AGDEX 281. R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This color, single-frame slidefilm of 26 frames is a supplement to Slidefilm 602. It contains pictures of the same annual garden flowers without titles and is intended for practice in identification. A key to the correct identification is included at the end of the slidefilm. Price: $2.35 postpaid when payment accompanies the order. Available in quantity from source.

## AGDEX 300 FORESTRY

39. OPERATING THE KNUCKLE-BOOM LOADER. 1973. AGDEX 200/50. R. J Mercer and J. R. Sterle. Source: Clemson University Vocational Education Media Center. Price: $2.00 in quantity; $2.25 per single copy. Available in limited quantity from source. Copy submitted to ERIC system.

## AGDEX 400 ANIMAL SCIENCE

40. ADVANCED LIVESTOCK PRODUCTION NOTEBOOK. 1972. AGDEX 400. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. An attractive three-ring, two-inch capacity red plastic notebook with dividers. This notebook was designed for the new advanced units in Beef, Dairy, and Swine. It could also be used for resource material in the Advanced Livestock Production courses. Price: $1.50 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

41. LIVESTOCK PRODUCTION (Student Study Guide). 1971. AGDEX 400. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in a specialized study of livestock production (beef, cattle, and swine).

Price: $1.00. Available in limited quantity from source. Available only in single copy.

42. ANIMAL BREEDING UNIT. 1971. AGDEX 400/35. Glen C. Shinn and Bob R. Stewart. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. A 60-page unit on animal breeding developed for teacher use. Included are student handouts and ten transparency masters. Price: To be announced. Available in quantity from source. Copy submitted to ERIC system.

43. TRANSPARENCY MASTERS FOR LIVESTOCK SELECTION. 1971. AGDEX 400/40. James R. Oglesby and Bob R. Stewart. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. Set of 27 transparency masters for Livestock Selection including beef, sheep, swine, horses and dairy. Price: To be announced. Available in quantity from source. Copy submitted to Eric system.

44. LIVESTOCK EVALUATION (JUDGING), HS-32. 1972. AGDEX 400/45. James S. Calloway (Edited and Revised by Wilson Glenn Collins). Source: Curriculum Development Center, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives, transparency masters, and content for teacher use in developing lesson plans in the Livestock Judging area. Price: Not for sale. One copy free on request for State Directors of Agricultural Education. Copy submitted to ERIC system. Not available from source.

45. ANIMAL NUTRITION UNIT. 1971. AGDEX 400/51. Glen C. Shinn and Bob R. Stewart. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. A 48-page unit on animal nutrition developed for teacher use. Included are student handouts and two transparency masters. Price: To be announced. Available in quantity from source. Copy submitted to ERIC system.

46. INSECT, TICK, AND MITE PESTS OF LIVESTOCK AND PETS. 1972. AGDEX 400/600. Clarence R. Fridline. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. Provides information on insects, ticks, and mites harmful to livestock, poultry, and pets. A description of each insect or other pest includes each life stage, type of metamorphosis, where each life stage will be found, the kind of damage done, and how serious the damage may be. Technical assistance was provided by Dr. W. F. Lyon, Extension Entomologist, The Ohio State University and Dr. R. E. Treece, Research Entomologist, The Ohio Agricultural Research and Development Center. Price: $1.25. Available in quantity from source. Copy submitted to ERIC system.

47. APPROVED PRACTICES FOR DAIRY COWS, Vol. 13, No. 5s. 1972. AGDEX 410. Robert Barr. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $.25. Available in quantity from source.

48. ADVANCED DAIRY PRODUCTION. 1972. AGDEX 410/20. Bob R. Stewart and William Jowell. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The material is organized into two units: (1) Raising Dairy Replacements, and (2) Milk Production. They may be taught independently or in sequence as part of the course Advanced Livestock Production. Teachers will find the materials most helpful in developing the course of study and individual problem areas. Included in the units are 27

transparency masters and 11 handouts for student use. The materials are agdexed and are attractively bound in a three-ring, two-inch capacity plastic binder. Price: To be announced. Available in quantity from source. Copy submitted to ERIC system.

49. APPROVED PRACTICES FOR DAIRY CALVES, Vol. 13, No. 4s. 1970. AGDEX 410/23. Robert Barr. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $.25. Available in quantity from source.

50. DAIRY CATTLE BREEDS (VAS 1046). 1972. AGDEX 410/30. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 12-page subject-matter unit illustrates and discusses the six common dairy cattle breeds and explains briefly three others. The pictures were taken of animals shown at the 1971 Illinois State Fair. Price: $.15 postpaid when payment accompanies order. Available in quantity from source. Copy submitted to ERIC system.

51. DAIRY CATTLE SIRE EVALUATION, Vol. 13, No. 1s. (Student Handbook). 1972. AGDEX 410/40. John V. Ishler and Glenn Z. Stevens. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $1.50 (estimated). Available in quantity from source. Copy submitted to ERIC system.

52. JUDGING THE DAIRY COW. 1972. AGDEX 410/45. Bob R. Stewart, James L. Kyle, William E. Jowell. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The set contains 68-2 x 2-inch slides in color, presenting the characteristics which must be considered in judging the dairy cow. Script is included. Price: $13.50 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

53. DIGESTION IN THE DAIRY COW. 1972. AGDEX 410/50. Rex E. Ricketts and F. Duane Dailey. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The set contains 106- 2 x 2-inch slides in color, covering the basic digestive process of the cow. The principles of digestion covered are appropriate for use with instructional units in both dairy and beef. Script is included. Price: $19.50 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

54. BASIC DAIRY HERD HEALTH. 1972. AGDEX 410/600. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

55. PREVENTING AND CONTROLLING MASTITIS, AS4. 1971. AGDEX 410/660. B. C. Bass. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

56. COMPUTE RATION BEEF. 1971. AGDEX 420. George Copa and Edgar Persons. Source: University of Minnesota, Agricultural Education Department, St. Paul, Minnesota 55101. Describes a computerized decision aid for calculating the least cost ration for producing a pound of beef. The important distinction of this program is that it computes a ration on the basis of the least cost per pound of beef rather than least cost per

pound of feed. The publication includes descriptions of program, output forms, and a sample of the output. Price: $1.00. Available in limited quantity from source.

57. PERMANENT IDENTIFICATION BY FREEZE BRANDING. 1972. AGDEX 420. Daryle Foster. Source: Instructional Materials Service, 201 Stone Hall, Cornell University, Ithaca, New York 14850. The purpose of this slide set is to describe and illustrate the freeze branding process including: the principle of freeze branding; advantages, materials, and equipment necessary; and step by step procedures to follow for freeze branding. Price: $7.50 = 27 slides and illustrated script; and $2.00 = taped narration on cassette. Available in quantity from source. Copy submitted to ERIC system.

58. CATTLE TRANSPARENCIES. 1972. AGDEX 420. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a set of 37- 8 1/2" x 11" transparencies, printed in colored ink on clear plastic. It also includes a white paper copy of each transparency with some text on the back for teacher use. The set is contained in a manilla pocket folder for filing. Price: $2.40 postpaid when payment accompanies the order. Available in quantity from source.

59. ADVANCED BEEF PRODUCTION. 1972. AGDEX 420. Bob R. Stewart and William Jowell. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The materials have been organized into three units: (1) Cow and Calf Production; (2) Stocker and Feeder Cattle; (3) Finishing Cattle for Market. They may be taught independently or in sequence as a part of the course Advanced Livestock Production. Teachers will find the materials most useful in developing the course of study and individual problem areas. Accompanying the units are 49 transparency masters and 96 pages of handouts. All materials have been adgeared for filing convenience. The materials the attractively bound in a three-ring two-inch capacity plastic binder. Price: $4.50 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

60. HANDOUTS FOR ADVANCED BEEF PRODUCTION. 1972. AGDEX 420. Bob R. Stewart and William Jowell. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. Contains 96 pages of handouts for student use which are keyed to the Missouri beef units: (1) Cow and Calf Production, 56 pages; (2) Stocker and Feeder Cattle, 16 pages; (3) Finishing Cattle for Market, 24 pages). The materials are organized numerically in pad form and it is suggested that one set of handouts be purchased for each student. Price: $1.00 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

61. FITTING AND SHOWING FFA BEEF CATTLE, LC No. 72-735030, 1972. AGDEX 420/47. Michael Hall. Source: Vocational Education Productions, California Polytechnic State University, San Luis Obispo, California 93401. This sound filmstrip covers procedures for preparing project beef animals for exhibition at fairs. Methods for halter training the animal are also discussed with emphasis on showmanship and sportsmanship. This is a complete revision of an earlier filmstrip with the same title. Since no set standard exists, this filmstrip helps point out definite taboos as well as showing the proper procedures to be followed. Price includes filmstrip, narration on cassette or reel tape and an illustrated script manual. Price: $7.50. Available in quantity from source.

62. PREVENTING AND CONTROLLING DISEASES AND PARASITES OF BEEF CATTLE, ASS. 1972. AGDEX 420/600. B. C. Bass. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

63. BREEDS OF SHEEP (Slidefilm 145). 1972. AGDEX 430/20. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61901. This is a color, single-frame slidefilm of 56 frames. It discusses and illustrates 12 common breeds and lists a number of the newer, lesser known breeds. Price: $3.40 postpaid if payment accompanies the order. Available in quantity from source.

64. SWINE PRODUCTION. 1972. AGDEX 440. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

65. APPROVED PRACTICES IN BREEDING SWINE, Vol. 13, No. 10. 1972. AGDEX 440. Robert Barr, William Williams, and Samuel McCurtis. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $.25. Available in quantity from source.

66. HANDOUTS FOR ADVANCED SWINE PRODUCTION. 1972. AGDEX 440. Bob R. Stewart and William Jowell. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. Contains 29 pages of handouts for student use which are keyed to the Missouri swine units: (1) Feeder Pig Production, 24 pages; (2) Finishing Market Hogs, 15 pages; (3) Producing Breeding Stock, 1 page. The materials are organized numerically in pad form and it is suggested that one set of handouts be purchased for each student. Price: $.20 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

67. ADVANCED SWINE PRODUCTION. 1972. AGDEX 440. Bob R. Stewart and William Jowell. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The materials have been organized into three units: (1) Feeder Pig Production; (2) Finishing Market Hogs; and (3) Producing Breeding Stock. They may be taught independently or in sequence as a part of the course Advanced Livestock Production. Teachers will find the materials most useful in developing the course of study and individual problem areas. The materials have been field tested and reviewed by specialists in Livestock Extension, University of Missouri. Also accompanying the Swine Units are 60 transparency masters and 29 pages of handouts. All materials have been agdexed for filing convenience. The materials are attractively bound in a three-ring, two-inch capacity plastic binder. Price: $2.00 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

68. SWINE UNIT. 1971. AGDEX 440. Billy Harrell and Bob R. Stewart. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. A 76-page unit on swine developed for teacher use. Included are student handouts and 24 transparency masters. Price: To be announced. Available in quantity from source. Copy submitted to ERIC system.

69. THE INSIDE STORY OF MADAM BROOD SOW. 1972. AGDEX 440/10. Herbert W. Barnes. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of 20-color

slides and illustrated script showing the sow's reproductive tract at progressive stages during gestation. The series was adapted from the Ralston Purina Company filmstrip of the same name. Price: $4.60. Available in quantity from source. Copy submitted to ERIC system.

70. USDA GRADES OF SWINE (VAS 1048). 1972. AGDEX 440/46. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 8-page subject-matter unit illustrates and discusses the USDA grades of live hogs and carcasses. Price: $.12 postpaid when payment accompanies order. Available in quantity from source. Copy submitted to ERIC system.

71. USDA SWINE AND PORK CARCASS GRADES (Slidefilm 168). 1972. AGDEX 440/46. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 50 frames. It illustrates live animals and carcasses of each of the various grades. Price: $3.20 postpaid if payment accompanies the order. Available in quantity from source. Copy submitted to ERIC system.

72. ORIENTATION TO HORSEMANSHIP, HS-43. 1972. AGDEX 460. Delmer Dalton (Edited and Revised by Wilson Glenn Collins). Source: Curriculum Development Center, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives, transparency masters, and content for teacher use in developing lesson plans in the Horsemanship area. Price: Not for sale. One copy free on request for State Directors of Agricultural Education. Copy submitted to ERIC system. Not available from source.

73. HORSES AND HORSEMANSHIP (VAS 1047). 1972. AGDEX 460. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 44-page subject-matter unit illustrates and discusses breeds, judging, feeding, grooming, fitting, and showing light horses. Much emphasis is put on horsemanship, such as mounting and dismounting, body position, backing, stopping, turning, etc. Price: $.66 postpaid when payment accompanies order. Available in quantity from source.

74. GOOD HORSEMANSHIP (Slidefilm 150). 1972. AGDEX 460. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 43 frames. It illustrates various things to check before mounting, how to mount properly, best positions for the hands and feet, and the proper position in the saddle at the various gaits. Price: $3.00 postpaid if payment accompanies the order. Available in quantity from source.

75. PREPARING THE HORSE FOR RIDING (Slidefilm 151). 1972. AGDEX 460. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 51 frames. It illustrates clipping, grooming, checking the feet and shoes, and checking and adjusting riding equipment. Price: $3.25 postpaid if payment accompanies the order. Available in quantity from source.

76. HORSE TRANSPARENCIES. 1973. AGDEX 460. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a set of 35- 8 1/2" x 11" transparencies printed in colored ink on clear plastic. It also includes a white paper copy of each transparency with some text on the back for teacher use. The set is contained in a manilla pocket folder for filing. Price: $2.90 postpaid if payment accompanies the order. Available in quantity from source.

77. JUDGING LIGHT HORSES. 1972. AGDEX 460/45. W. H. Witt. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a 20-page, two color, 8 1/2" x 11" publication on the judging of light horses. The division headings are: What is Judging; Entering a Judging Contest; Parts of the Horse; Main Points to Consider; Developing a Judging System; Giving Reasons; Judging Terms; Sample Reasons; How to Take Notes; and Use of Placing Card. Price: $.30 postpaid when payment accompanies order. Available in quantity from source.

## AGDEX 500 SOILS

78. UNDERSTANDING SOILS (VAS 4052). 1972. AGDEX 500. W. R. Oschwald and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 20-page subject-matter unit discusses the following questions: (1) What is a Soil? (2) How Were Soils Formed? (3) How Do Soils Differ? and (4) How Do I Determine the Land Class? Price: $ .25 postpaid when payment accompanies the order. Available in quantity from source. Copy submitted to ERIC system.

79. USING THE ILLINOIS SOIL JUDGING SCORECARD (VAS 4053). 1972. AGDEX 525. W. R. Oschwald and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 24-page subject-matter unit discusses soil properties; landscape position; percent slope; color; texture; structure; and other soil associated features. These factors are used in soil judging to determine sound land-use and management. Price: $.36 postpaid when payment accompanies the order. Available in quantity from source.

80. TESTING SOIL, APS. 1972. AGDEX 533. C. E. Richard. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

81. CONSERVATION-WATER. 1972. AGDEX 570. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

## AGDEX 600 DISEASES AND PESTS

82. SOME COMMON TYPES OF INSECTS. 1972. AGDEX 610. Clarence R. Fridline. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A student manual designed to assist the pupil in being familiar with some common insects. An introduction to the system of classifying insects. Price: $.40. Available in quantity from source. Copy submitted to ERIC system.

83. APPROVED PRACTICES FOR BEEKEEPING, Vol. 13, No. 3e. 1972. AGDEX 616. Robert Barr. Source: The Department of Agricultural Education 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $.25. Available in quantity from source.

84. AGRICULTURAL PESTICIDES--PLANT DISEASES AND METHODS OF APPLYING PESTICIDES, AES. 1971. AGDEX 630. Bobby R. Wright. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

85. THE WICKED WORLD OF WEEDS (Slidefilm 611). 1972. AGDEX 640. E. L. Knake and P. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 77 frames. It explains how weeds are harmful to man. It is aimed at informing farm and urban audiences alike that they both share in the cost and discomfort of weeds. Price: $3.95 postpaid when payment accompanies the order. Available in quantity from source.

86. VEGETATION CONTROL--AS AN AID TO ENVIRONMENTAL QUALITY (Slidefilm 1102). 1972. AGDEX 641. L. S. White and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 69 frames. It is accompanied by a script or study guide. It illustrates in cartoon fashion how the control of weeds along our nation's highways is an aid to improving the beauty of our environment. A cassette tape narration of the script is available, as are additional copies of the study guide. Price: Slidefilm with student study guide, $4.05; cassette tape narration of script, $3.00. Additional copies of study guide, $.25 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

87. CONTROLLING WILD HEMP (MARIJUANA) (Slidefilm 910). 1972. AGDEX 641. E. L. Knake and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 45 frames. It shows growth habit, leaf shape, means of reproduction, and various ways to identify the plant. Control methods are also discussed. Price: $2.95 postpaid when payment accompanies the order. Available in quantity from source.

88. THE EFFECTIVE USE OF DRUGS IN CONTROLLING LIVESTOCK DISEASES, AE4. 1971. AGDEX 660. Bobby R. Wright. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

89. RATS AND THEIR CONTROL, AE1. 1971. AGDEX 682. Bobby R. Wright. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

90. CONTROL OF WILDLIFE PESTS, AE3. 1971. AGDEX 684. Bobby R. Wright. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

91. CONTROLLING DAMAGE CAUSED BY BIRDS, AE2. 1971. AGDEX 685. Bobby R. wright. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

## AGDEX 700 AGRICULTURAL ENGINEERING

92. MATERIALS HANDLING-MECHANICS. 1972. AGDEX 700. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

93. MECHANICS CONCEPTS. 1972. AGDEX 700. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison Wisconsin 53702. Price: No charge. Available in limited quantity from source.

94. A SELECTED LIST OF EDUCATIONAL MATERIALS AVAILABLE FROM COMMERCIAL BUSINESSES. 1972. AGDEX 701. John F. Deasy, Jr. Source: Instructional Materials Service, 201 Stone Hall, Cornell University, Ithaca, New York 14850. A listing of educational materials available from industry. Items covered are in the areas of Agricultural Mechanization, Wood and Metal Working, Shop and Power Tools, Electrification, Concrete Working, and Automotative and Farm Machinery Technology. Price: $2.75. Available in quantity from source.

95. PLANNING FOR AN IRRIGATION SYSTEM SLIDE SET---parallels the publication of the same title. 1972. AGDEX 753. Turner, Anderson, Smith and Wren. Source: American Association for Vocational Instructional Materials, Engineering Center, Athens, Georgia 30601. Shows irrigation systems, layout, component parts, terrain, rainfall charts, soil types, soil condition, and tables to compare effects of irrigating. Price: Set I, $35.00; Set II, $62.00; both sets, $97.00. Available in quantity from source. Copy submitted to ERIC system.

96. AGRICULTURE POWER-HYDRAULICS. 1972. AGDEX 760. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

97. HYDRAULICS. 1972. AGDEX 760. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

98. TIMING SMALL GAS ENGINES-ESTABLISHING PISTON POSITION, M5.1. 1972. AGDEX 761. Howard Broock and George Welles. Source: Instructional Materials Service, 201 Stone Hall, Cornell University, Ithaca, New York 14850. A silent Super-8 single concept film loop packaged in a Technicolor film magazine showing steps in establishing proper piston position prior to timing a small gasoline engine. Price: $19.50. Available in quantity from source.

99. TIMING SMALL GAS ENGINES -THE CELLOPHANE METHOD, M5.2. 1972. AGDEX 761. Howard Broock and George Welles. Source: Instructional Materials Service, 201 Stone Hall, Cornell University, Ithaca, New York 14850. A silent Super-8 film loop packaged in a Technicolor film magazine showing the steps in timing a small gasoline engine using the Cellophane technique. Price: $19.50. Available in quantity from source.

100. TIMING SMALL GAS ENGINES - THE OHMMETER METHOD, M5.3. 1972. AGDEX 761. Howard Broock and George Welles. Source: Instructional Materials Service, 201 Stone Hall, Cornell University, Ithaca, New York 14850. A silent Super-8 single concept film loop packaged in a Technicolor film magazine showing steps in timing a small gasoline engine using an ohmmeter. Price: $19.50. Available in quantity from source.

101. TIMING SMALL GAS ENGINES - THE TEST LIGHT METHOD, M5.4. 1972. AGDEX 761. Howard Broock and George Welles. Source: Instructional Materials Service, 201 Stone Hall, Cornell University, Ithaca, New York 14850. A silent Super-8 film loop packaged in a Technicolor film magazine, showing the steps in timing a small gasoline engine using a test light. Price: $19.50. Available in quantity from source.

Diesel Slide Sets. 1972. AGDEX 761. R. F. Espenschied and others. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. These slide sets were prepared for use in community colleges and technical schools for programs training diesel mechanics. The specific nature of each slide set is indicated by the title, as listed and priced below. Available in quantity from source.

102. INSTALLING THE ROOSA MASTER D SERIES PUMP. 26 slides. $5.20.

103. REMOVAL OF CAV DISTRIBUTOR-TYPE (DPA) PUMP. 21 slides. $4.20.

104. REMOVAL OF ROBERT BOSCH IN-LINE DIESEL FUEL INJECTION PUMP. 24 slides. $4.80.

105. ROBERT BOSCH DISTRIBUTOR-TYPE PUMP - CHECKING LIFT TO PORT CLOSURE. 19 slides. $3.80.

106. MOUNTING THE ROBERT BOSCH DISTRIBUTOR-TYPE PUMP ON THE ROBERT BOSCH FUEL INJECTION TEST BENCH. 32 slides. $6.40.

107. REMOVAL OF ROBERT BOSCH DISTRIBUTOR-TYPE PUMP FROM TRACTOR. 30 slides. $6.00.

108. MOUNTING THE ROOSA MASTER PUMP IN THE BACHARACH CALIBRATION STAND. 39 slides. $7.80.

109. BACHARACH NOZZLE TESTER MAINTENANCE. 38 slides. $7.60.

110. ROBERT BOSCH FUEL INJECTION TEST BENCH MAINTENANCE. 25 slides. $5.00.

111. BACHARACH CALIBRATION TEST STAND MAINTENANCE. 38 slides. $ 7.60.

112. INSTALLING AND OPERATING THE TUXCO FUEL RATOR. 41 slides. $8.20.

113. REMOVING DIESEL INJECTION NOZZLES. 20 slides. $4.00.

114. SERVICING DIESEL INJECTION NOZZLES. 29 slides. $5.80.

115. TESTING DIESEL INJECTION NOZZLES. 24 slides. $4.80.

116. TYPES OF DIESEL INJECTION NOZZLES. 14 slides. $2.80.

117. CALIBRATION OF ROOSA-MASTER PUMP ON BACHARACH CALIBRATION STAND. 36 slides. $7.20.

118. SMALL GASOLINE ENGINES-FLOAT-TYPE CARBURETOR REPAIR. 1973. AGDEX 761. R. J. Mercer. Source: Clemson University Vocational Education Media Center. Price: Price not available. Available in limited quantity from source. Copy submitted to ERIC system.

119. TRACTOR TUNEUP AND MAINTENANCE TRANSPARENCIES. 1972. AGDEX 763. R. F. Espenschied. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a set of 36 transparencies (8 1/2" x 11") printed in colored ink on clear plastic, for use on the overhead projector. These are cartoons illustrating tractor tuneup and maintenance of the cooling system, air cleaner, lubrication, ignition, fuel and hydraulic system. The set also includes a white paper copy of each transparency with supplemental information printed on the back. The set is contained in a manila pocket folder for filing. Price: $2.35 post-paid when payment accompanies the order. Available in quantity from source.

120. FARM TRACTOR TUNE-UP AND SERVICE SPECIFICATIONS REVISION. 1972. AGDEX 763. Bryabt, Turner and Smith. Source: American Association for Vocational Instructional Materials, Engineering Center, Athens, Georgia 30601. Provides critical adjustment, tune-up and service information for all farm tractors built since 1948. Also provides information on proper engine speeds at low idle, and at maximum load and no-load speeds. PTO speeds are given for both load and no-load operation. Includes tractor horsepower, new oil classification, calcium chloride recommendations for tires, and freezing protection table. Price: $4.20. Available in quantity from source. Copy submitted to ERIC system.

121. UNDERSTANDING ELECTRICITY AND ELECTRICAL TERMS, AM2. 1972. AGDEX 770. Robert A. Wall. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

122. DEMONSTRATIONS FOR THE ELECTRICAL TEACHING CENTER, AM5. 1972. AGDEX 770. Robert A. Wall and E. Steven Bell, Jr. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

123. PLANNING AND INSTALLING THE FARMSTEAD WIRING SYSTEM, AM3. 1972. AGDEX 772. Robert A. Wall. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

124. USING ELECTRICAL CONTROL DEVICES, AM4. 1972. AGDEX 772. Robert A. Wall. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

125. ELECTRIC MOTORS, SELECTION-PROTECTION-DRIVES REVISION. Also paralleling slide set and black and white masters. 1972. AGDEX 773. Parady and Winsett (Consultant). Source: American Association for Vocational Instructional Materials, Engineering Center, Athens, Georgia 30601. Information and procedures for selecting electric motors that include motor size, motor speed, motor duty, motor type, type of bearings, type of enclosure, type of mounting base, overload protective devices, and motor drives. Price: $2.60 each for publication; $45.00 for slide set and $7.00 for master set. Available in quantity from source. Copy submitted to ERIC system.

126. CALCULATING ELECTRICAL NEEDS AND COSTS, AM1. 1972. AGDEX 776. Robert A. Wall. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

127. HOW TO BUILD AN OXY-ACETYLENE WELDING TABLE. 1972. AGDEX 781. Richard E. Linhardt. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The bulletin serves as a guide and general plan for constructing an oxy-acetylene welding table. Easy to follow step-by-step procedures with detailed drawings and a bill of materials included. Price: $.25 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

128. HOW TO BUILD A BARREL BARBECUE. 1971. AGDEX 781. Curtis R. Weston, Vincil Warren, and Glen C. Shinn. Source: Instructional Materials Laboratory, 8 Industrial Education,University of Missouri-Columbia, Columbia, Missouri 65201. The bulletin serves as a guide and general plan for constructing a barrel barbecue. Easy to follow step-by-step procedures with photographs, detailed drawings and a bill of materials included. Price: $.35 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

129. HOW TO BUILD AN ALL-PURPOSE WAGON BOX. 1971. AGDEX 781. Curtis R. Weston, Richard E. Linhardt, Marion Kimmons, and Dale Pontius. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The bulletin serves as a guide and general plan for constructing an all-purpose wagon box. Easy to follow step-by-step procedures with photographs, detailed drawings and a bill of materials are included. Price: $.50 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

130. HOW TO BUILD A WAGON CHASSIS. 1971. AGDEX 781. Curtis R. Weston, Jesse Clonts, Marvin Parker, Marion Kimmons, and Dale Pontius. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The bulletin serves as a guide and general plan for constructing a wagon chassis. Easy to follow step-by-step procedures with photographs, detailed drawings and a bill of materials included. Price: $.65 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

131. HOW TO BUILD A HEAVY DUTY TRUCK BUMPER. 1971. AGDEX 781. Richard E. Linhardt and Kenneth Lockridge. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The bulletin serves as a guide and general plan for contructing a heavy duty truck bumper. Easy to follow step-by-step procedures with detailed drawings and bill of materials included. Price: $.25 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

132. SPRAY PAINTING TRANSPARENCIES. 1972. AGDEX 784. R. F. Espenschied. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a set of 50 transparencies (8 1/2" x 11") printed in colored ink on clear plastic, for use with overhead projector. The illustrations include characteristics of guns and nozzles, proper techniques, selection and installation of compressors, suggestions on mixing paint and proper procedure for cleaning the spraying equipment. The set also includes a white paper copy of each transparency that can be used in preparing duplicate copies. The back of the paper copy contains information about the illustration that can be used by instructors as well as students. The

set is contained in a manilla pocket folder for filing. Price: $4.10 postpaid when payment accompanies the order. Available in quantity from source.

133. TUNGSTEN INERT GAS (TIG) WELDING (VAS 3036). 1972. AGDEX 785. R. F. Espenschied. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 32-page subject-matter unit lists the equipment needed for TIG welding, how to set up and adjust the welder, techniques to use, procedures to follow to weld various metals and how to maintain the welder. Price: $.40 postpaid when payment accompanies the order. Available in quantity from source. Copy submitted to ERIC system.

134. METALLIC INERT GAS (MIG) WELDING (VAS 3037). 1972. AGDEX 785. R. F. Espenschied. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 44-page subject-matter unit lists how to select and set up MIG welding equipment and gives the procedures to follow in welding various metals with both solid wire and flux cored wire electrodes. Price: $.55 postpaid when payment accompanies the order. Available in quantity from source. Copy submitted to ERIC system.

135. GAS WELDING SAFETY TRANSPARENCIES. 1972. AGDEX 785. R. F. Espenschied. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a set of 40 transparencies (8 1/2" x 11") printed in colored ink on clear plastic, for use on the overhead projector. These are cartoons illustrating safety in cylinder handling, equipment use, operator safety and general safety when using compressed gases for welding. There is a white paper copy of each transparency and the back of the paper copy contains information about the illustration that can be used by instructors. The set is contained in a manila pocket folder for filing. Price: $2.60 postpaid when payment accompanies the order. Available in quantity from source.

## AGDEX 800 AGRICULTURAL ECONOMICS

136. PRINCIPLES OF AGRICULTURAL MANAGEMENT DECISION MAKING. 1972. AGDEX 810. Donald D. Osburn and William B. Richardson, Jr. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The unit contains seven problem areas to be used as a guideline for teacher use in planning instruction for an advanced course in farm management at the secondary level. Much of the material could be used with adult and young farmer groups. The material contains 31 transparency masters and 24 handouts for student use. Price: $3.40 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

137. A COURSE OF STUDY FOR ADULT INSTRUCTION IN FARM MANAGEMENT AND FARM BUSINESS ANALYSIS - Third Edition. 1972. AGDEX 810. Edgar Persons and Ralph Palan. Source: Department of Agriculture Education, University of Minnesota, St. Paul,Minnesota 55101. Describes the course of study for the first three years of management instructions including content, procedure, and on-farm activity. Price: $5.00. Available in quantity from source.

138. A TEACHER'S GUIDE TO FARM MONEY MANAGEMENT. 1972. AGDEX 810. Bert Showman. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. This guide was developed to assist teachers of vocational agriculture in teaching young and adult farmers as well as high school farm management classes. It deals with the ability to manage money wisely and examples are based upon the Farm Accounting Problem, available from

the same source. The lessons are entitled as follows: The Need for Capital in the Farm Business; Preparation and Analysis of a Net Worth Statement; Cash Flow; The Use of Farm Credit; Investing for the Greatest Rerun; Income Tax Management; and Developing a Farm Financial Plan. The units are prepared in loose leaf form to be inserted into a notebook. Price: $2.00. Available in quantity from source. Copy submitted to ERIC system.

139. UNIT BUDGETS FOR MAJOR LIVESTOCK AND CROP ENTERPRISES, 1972. AGDEX 810. Roger C. Nicol and William E. Hudson. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. Unit budgets have been prepared for various production and price levels within each enterprise group. They are based upon average cost and price figures. The primary purpose of these budgets will be as guidelines for teachers to use in helping high school students develop budgets for crop and livestock enterprises and in helping farm operators with farm planning and reorganization. Edited by Dr. John T. Starling, Department of Agricultural Education, The Ohio State University. Price: $1.00. Available in quantity from source. Copy submitted to ERIC system.

140. STANDARDS FOR MEASURES OF EFFICIENCY. Revised 1972. AGDEX 810. J. H. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 6-page item is made available annually. It can serve as a means of comparing results of students' farming programs and also records of young farmers and adults. Estimated price changes are applied to physical measures obtained by farm management cooperators in previous years to get an estimate of measures for 1972. Price: Pack of 10, $.60 postpaid when payment accompanies the order. Available in quantity from source.

141. ESTATE PLANNING - A SOURCE UNIT FOR ADULT EDUCATION IN AGRICULTURAL OCCUPATIONS, Revised 1972. AGDEX 812. Paul E. Hemp. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 14-page source unit was designed to accompany a packet of subject matter materials on Estate Planning. The problem area outline includes: (1) Understanding the Importance of Estate Planning; (2) Minimizing Inheritance and Gift Taxes; (3) Understanding the State Laws of Descent; (4) Understanding and Writing a Will; (5) Understanding the Types of Property Ownership; (6) Using the Partnership and Corporation in Estate Planning; and (7) Understanding and Using Trusts and Life Insurance in Estate Planning. Price: $.20 per copy postpaid when payment accompanies order. Available in quantity from source.

142. PLANNING THE CROPPING SYSTEM (VAS 2003b). Revised 1972. AGDEX 815. J. H. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 16-page subject matter unit discusses factors to consider in selecting a cropping system; erosion-control practices to use; selecting cropping systems according to net returns, consistent with the universal soil-loss equation; and fitting the cropping system to the field layout. Price: $.20 postpaid when payment accompanies the order. Available in quantity from source. Copy submitted to ERIC system.

143. CHOOSING SPECIFIC CROPS TO GROW AND ESTIMATING PRODUCTION (VAS 2006b). Revised 1972. AGDEX 815. J. H. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 16-page subject matter unit includes the following: classification of crops, determining which crops to grow, crop sequences to use, estimating crop yields to be obtained, choosing crops for the problem farm, and estimating crop production and its value on the problem farm. Price: $.20 postpaid when payment accompanies the order. Available in quantity from source. Copy submitted to ERIC system.

144. GUIDELINES FOR USING THE COMPUTERIZED DEPRECIATION SCHEDULE. 1972. AGDEX 818. Edgar Persons and Ralph Palan. Source: Department of Agriculture Education, University of Minnesota, St. Paul,Minnesota 55101. Instructions for using the computerized depreciation schedule as part of the farm business management program -used only in conjunction with the Business Analysis program. Price: $.50. Available in quantity from source.

145. INSTRUCTIONS FOR COMPLETING COMPUTER DATA SHEETS. 1972. AGDEX 818. Edgar Persons and Ralph Palan. Source: Agriculture Education Department, University of Minnesota, St. Paul, Minnesota 55101. Special instructions for completing the computer data forms for the business analysis program in farm management education. Provides all instructions necessary for submitting farm business data for analysis. Price: $.50. Available in quantity from source.

146. DOCUMENTATION FOR FARM BUSINESS ANALYSIS. 1972. AGDEX 818. Edgar Persons. Source: Agriculture Education Department, University of Minnesota, St. Paul, Minnesota 55101. Describes step-by-step how the data from a farm business is organized for the computerized analysis of the farm business. The reader can reconstruct each item that appears on the business analysis. Price: $.50. Available in quantity from source.

147. FARM ACCOUNTING PROBLEM. 1972. AGDEX 818. John P. Morgan. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A two part farm accounting problem designed for use with the Ohio Commercial Farm Account Book. The problem is realistic and will involve the students in most of the problems encountered in record keeping. The student part presents the problem with suggestions about how to make entries. The teacher part gives suggestions for teaching and makes page reference to Farm Records - A Management Tool (available from the same source). Price: $2.00, Teacher's Manual; $1.50, Student's Manual. Available in quantity from source. Copy submitted to ERIC system.

148. FARM RECORDS - A MANAGEMENT TOOL. 1972. AGDEX 818. Jerry Berg. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. This publication is designed to aid teachers of vocational agriculture and extension personnel in teaching farm business records and accounting. The content is built around the Ohio Commercial Farm Account Book, however, the accounting principles used in the publication would have application to other record keeping systems. The first edition was prepared by Dr. Floyd McCormick. Price: $2.00. Available in quantity from source. Copy submitted to ERIC system.

149. COST ACCOUNT CHARGES FOR AGRICULTURAL PRODUCTION RECORDS, Vol. 13, No. 6a. 1972. AGDEX 821. William Williams. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $.25. Available in quantity from source.

150. EFFICIENCY FACTORS FOR PRODUCTION ENTERPRISES, Vol. 13, No. 7a. 1972. AGDEX 826. William Williams. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $.10. Available in quantity from source.

151. FARM MANAGEMENT - FINANCIAL PLANNING -- CAPITAL AND CREDIT, AE6. 1972. AGDEX 831. Bobby R. Wright. Source: Agricultural Education, College of Education, VPI & SU, Blacksburg, Virginia 24061. Teaching guide. Price: Not for sale. Copy submitted to ERIC system.

152. INSTRUCTIONAL UNITS ON AGRICULTURAL MARKETING PRINCIPLES. Revised 1972. AGDEX 840. Developed by Phillip R. Zarbrick, revised and adapted to the Midwest by Richard A. Reid. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A teacher manual containing instructional units designed to assist agricultural educators in helping their students discover the application of basic marketing principles to the business of agriculture. Price: $2.25. Available in quantity from source. Copy submitted to ERIC system.

## AGDEX 900 AGRICULTURAL OCCUPATIONS

153. LEARNING ACTIVITY PAC - AGRICULTURE - THE WORLD OF WORK. 1972. AGDEX 900. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

154. IMPROVED READING THROUGH AGRIBUSINESS CAREERS. 1972. AGDEX 900. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

155. THE WORLD OF WORK - PART II. 1972. AGDEX 900. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

156. AGRICULTURE: CAREERS THAT IMPROVE THE QUALITY OF LIFE, RESTORE THE ENVIRONMENT, FEED THE WORLD. 1972. AGDEX 900. Maryland Vo-Ag Teachers Association. Source: C/O Mr. Glenn Lewis, Department of Vo-Tech. Education, Maryland State Department of Education, P. O. Box 8718, Friendship International Airport, Baltimore, Maryland 21240. Career education bulletin for agriculture. Copy submitted to ERIC system.

157. UPS AND DOWNS, THE BASIC PRINCIPLES OF LADDER SAFETY. 1972. AGDEX 900. Joseph A. Gliem. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. Designed for students in Agricultural Education programs who have an occasion to use some type of ladder in their work. The reference has been developed to help the student select and use a ladder safely to prevent injury. Price: $.25. Available in quantity from source. Copy submitted to ERIC system.

158. LADDER SAFETY TEST. 1972. AGDEX 900. Joseph A. Gliem. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A two page test based upon the manual Ups and Downs, The Basic Principles of Ladder Safety (available from the same source). Available in quantity from source. Copy submitted to ERIC system.

159. CAREERS I UNIT. 1971. AGDEX 900. Venton Haskins and Bob R. Stewart. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. A 46-page unit on Careers developed for teacher use. Included are student handouts and 8 transparency masters. Price: To be announced. Available in quantity from source. Copy submitted to ERIC system.

160. ORIENTATION TO OFF-FARM AGRICULTURAL OCCUPATIONS, HS-72. 1972. AGDEX 900. Norris E. Carney (Edited and Revised by Wilson Glenn Collins). Source: Curriculum Development Center, Room 151, Taylor Education Building, University of Kentucky, Lexington, Kentucky 40506. An instructional unit for teacher use. The unit includes objectives, transparency masters, and content for teacher use in developing lesson plans in the Off-Farm Agriculture Occupation area. Price: Not for sale. One copy free on request for State Directors of Agricultural Education. Copy submitted to ERIC system. Not available from source.

161. PRE-PROFESSIONAL AGRICULTURE (Student Study Guide). 1971. AGDEX 900. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A student study guide for 11th and 12th grade students who have an interest in attending college and majoring in some phase of agriculture but not sure of a definite field. Basic information and subject matter is presented in such fields as Agronomy and Soils, Entomology, Botany and Plant Pathology, Animal Science, etc. (14 areas). Price: $1.00. Single copy available in limited quantity from source.

162. AWE - A VOCATIONAL EDUCATION PROGRAM WITH A SPECIAL ACCENT. 1972. AGDEX 900/06. Theodore P. Shannon. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of 28-color slides and script which depict the developmental stages and highlights of a well operated AWE program. Price: $4.75. Available in quantity from source. Copy submitted to ERIC system.

163. FAMINE FIGHTERS--CAREERS IN PRODUCTION AGRICULTURE. 1972. AGDEX 910. R. W. Walker and M. Thornton. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. Kit contains a 69-frame slidefilm, a 10-minute cassette tape narration, a teacher's guide, and 25 copies of a student brochure "We Want You." This series depicts career opportunities in production agriculture and is intended for use with junior high or high school students. Price: Complete kit, $6.25; additional student brochures, $2.50 per 100. All prices postpaid when payment accompanies the order. Available in quantity from source.

164. AGRICULTURE SALES AND SERVICE. 1972. AGDEX 920. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

165. AGRICULTURAL SUPPLIES -- SALES AND SERVICES FOR AREA VOCATIONAL CENTERS (Course Outline). 1971. AGDEX 920. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A course outline that is largely limited to preparing students to sell production agricultural supplies such as feeds, seeds, fertilizer, chemicals, and small items and equipment of a similar use. Price: $1.00. Single copy available in limited quantity from source.

166. AGRICULTURAL SUPPLIES (Student Study Guide). 1971. AGDEX 920. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in a specialized study of agricultural supplies (feeds, seeds, fertilizers, chemicals, building materials). Price: $1.00. Single copy available in limited quantity from source.

167. HELP (OPPORTUNITIES IN SUPPLY AND SERVICE). 1972. AGDEX 920. R. W. Walker and M. Thornton. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. Kit contains a 50-frame slidefilm, a 10-minute cassette tape narration, a teacher's guide, and 25 copies of a student brochure "We Want You." This series depicts career opportunities in agricultural supply and service and is intended for use with junior high or high school students. Price: Complete kit, $6.25; additional student brochures, $2.50 per 100. All prices postpaid when payment accompanies the order. Available in quantity from source.

168. SIMPLIFYING WORK IN AN AGRICULTURAL BUSINESS (VAS 6006). 1972. AGDEX 920. J. R. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 20-page subject matter unit discusses the work simplification procedure as it applies to farming and other agricultural businesses, charts that can be used for studying various jobs, and when it pays to invest in labor-saving equipment. A number of examples are used to illustrate improvements in efficiency in operating stores and warehouses. Price: $.25 postpaid when payment accompanies the order. Available in quantity from source. Copy submitted to ERIC system.

169. MANAGING AN AGRICULTURAL SUPPLIES BUSINESS: A COMPUTER GAME, Vol. 12, No. 2a. 1972. AGDEX 920. John Greenbaum, Glenn Z. Stevens, Samuel M. Curtis. Source: The Department of Agricultural Education, 102 Armsby, The Pennsylvania State University, University Park, Pennsylvania 16802. Price: $1.25 each. Available in quantity from source. Copy submitted to ERIC system.

170. A MODEL FOR TASK ANALYSIS IN AGRIBUSINESS. 1972. AGDEX 920. Arthur L. Berkey, William E. Drake and James W. Legacy. Source: ERIC. Also, limited single copies available from A. Berkey, Division of Agricultural & Occupational Education, Stone Hall, Cornell University, Ithaca, New York 14850. A model for task analysis that involves identification of functions executed in an industry and the tasks performed to fulfill these functions. Industry experts validate the functions and tasks, and also provide data in task conditions and levels of task performance. Job titles are bypassed in the function-task approach. Price: Single copies available from A. Berkey only until supply is exhausted. Reference ERIC number. Single copies for mailing costs. Copy submitted to ERIC system.

171. THE USE OF THE CASH REGISTER (VAS 6005). 1972. AGDEX 920/10. E. E. Trotter. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 6-page subject matter unit has the following subdivisions: (1) How Should I Set Up the Cash Register for Daily Use? (2) Procedure for Handling Money. (3) How Do I Operate the Cash Register? Price: $.10 postpaid when payment accompanies the order. Available in quantity from source. Copy submitted to ERIC system.

172. AGRICULTURAL CREDIT INSTRUMENTS (VAS 6007). 1972. AGDEX 920/10. J. R. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 12-page subject matter unit includes discussions of checks, drafts, promissory notes, warehouse receipts, bills of lading, reinsure, and satisfactions. Most of the instruments are illustrated with examples. Price: $.10 postpaid when payment accompanies the order. Available in quantity from source.

173. CUSTOMER CREDIT MANAGEMENT IN AGRICULTURAL BUSINESSES, (VAS 6008). 1972. AGDEX 920/11. D. L. Brooks. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 12-page subject matter unit has the following headings: (1) What should be the Basis for the Credit-Manage-

ment program? (2) Which customers should get credit? (3) Would a cash-only business be more profitable? (4) How should accounts receivable be handled? Price: $.10 postpaid when payment accompanies the order. Available in quantity from source.

174. WHAT FACTORS AFFECT PRICES OF AGRICULTURAL PRODUCTS? (VAS 6009). 1972. AGDEX 920/36. R. M. Leuthold. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 12-page subject matter unit includes a discussion of the effects of demand and supply on price, the effects of foreign trade, and the effects of government programs, as well as the relation of the overall economy to agriculture. A number of illustrations are included about price changes. Price: $.10 postpaid when payment accompanies the order. Available in quantity from source.

175. PRODUCT COMPETITION (Slidefilm 304). 1972. AGDEX 920/30. E. E. Trotter and J. H. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 40-frame, color slidefilm is accompanied with a study unit. Illustrated are such topics as: (1) Use of comparison shopping; (2) Study of advertising; (3) Study of sales literature, and Questioning of customers. Along with these are included: (1) Checking of substitute items; (2) Getting knowledge of competitors' sources of supply and sales policies, (3) Evaluating the competitors' product, and (4) Studying the competitors' assortments, prices, and product safety features. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $3.20; cassette tape narration of script, $3.00; additional copies of study guide, $.20 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

176. PRODUCT KNOWLEDGE (Slidefilm 302). 1972. AGDEX 920/33. E. E. Trotter and J. H. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 32-frame slidefilm is in color and is accompanied with a study guide. The material illustrates the following: (1) How the product was developed, (2) Who makes it, (3) What time of year it is purchased, (4) Where the retailer buys it, (5) How does the customer benefit from its use, (6) How the product is made, (7) How it is prepared for sale, (8) How the product is stored, (9) How the product is handled, (10) What service is available, and (11) What safety precautions should be taken in its use. Price: Slidefilm with student study guide, $3.20; cassette tape narration of script, $3.00; additional copies of study guide, $.25 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

177. HUMAN RELATIONS IN AGRICULTURAL BUSINESS (Slidefilm 308). 1972. AGDEX 920/30. E. E. Trotter and J. H. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 37-frame color slidefilm illustrates various aspects of: evaluating personal appearance, communicating properly and effectively, personality characteristics, proper etiquette, getting along with others in the business, and pleasing the customer. The illustrations are related to young people studying agricultural occupations. Price: $3.35 postpaid when payment accompanies the order. Available in quantity from source.

178. INVENTORY MANAGEMENT AND CONTROL (VAS 6010). 1972. AGDEX 920/72. D. L. Brooks. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 6-page subject-matter unit contains the following topics: (1) How can I Control Inventories? (2) How Can I Visualize the Inventory Costs to Include? (3) How can I Determine the Most Profitable Level of Inventory? (4) How

Can I Determine How Much and How Often to Order? Price: $.12 postpaid when payment accompanies the order. Available in quantity from source.

179. FEEDS. 1972. AGDEX 921. Harry Plask. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. Prepared for the agricultural business and service student who is working in a place of business that prepares and sells feed to livestock producers. Provides knowledge about feeds, suggestions for assisting customers, preparation and mixing of feeds, and legal requirements. Practical exercises are provided for the student with suggested solutions given in the Teacher's Guide. Price: Student Manual, $1.75. Teacher's Manual, $1.00. Available in quantity from source. Copy submitted to ERIC system.

180. AGRICULTURAL CHEMICALS. 1972. AGDEX 924. Harry Plask. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. Designed for the agricultural business and service student who will be working with the sale and use of agricultural chemicals. Teacher's guide to supply answers to student exercises. Price: Teacher's Guide, $1.00. Student Manual, $2.00. Available in quantity from source. Copy submitted to ERIC system.

181. AGRICULTURE SALES AND SERVICE - MACHINERY MAINTENANCE. 1972. AGDEX 930. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

182. THINK BIG (AGRICULTURAL MECHANICS). 1972. AGDEX 930. R. W. Walker and M. Thornton. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. Kit contains a 54-frame slidefilm, a 10-minute cassette tape narration, a teacher's guide, and 25 copies of a student brochure "We Want You (Agricultural Mechanics)." This series depicts career opportunities in Agricultural Mechanics and is intended for use with junior high or high school students. Price: Complete kit, $6.25; additional student brochures, $2.50 per 100. All prices postpaid when payment accompanies the order. Available in quantity from source.

183. AGRIBUSINESS POWER AND DIESEL MECHANICS FOR AREA VOCATIONAL CENTERS (Course Outline). 1971. AGDEX 930. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A course designed to acquaint students with subject matter, skills, and competencies necessary for efficient operation, servicing, repair and marketing of agricultural power machinery and related equipment. Price: $1.00. Single copy available in limited quantity from source.

184. AGRIBUSINESS BUILDING CONSTRUCTION FOR AREA VOCATIONAL CENTERS (Course Outline). 1971. AGDEX 934. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Ala. 36830. A course outline that presents subject matter and learning activities designed to enable students to develop an understanding of the basic principles and concepts in the area of building construction. Price: $1.00. Single copy available in limited quantity from source.

185. AGRICULTURAL PRODUCTS (Student Study Guide). 1971. AGDEX 940. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th

grade students interested in a specialized study of grading, processing, and marketing of agricultural products. Price: $1.00. Single copy available in limited quantity from source.

196. DAIRY PRODUCT MANUFACTURING - BUTTER AND CHEESE. 1972. AGDEX 941. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

197. CANNING INDUSTRY - COMMERCIAL PRODUCTION OF VEGETABLE CROPS. 1972. AGDEX 942. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

198. THE CANNING INDUSTRY - VEGETABLE PROCESSING. 1972. AGDEX 942. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

199. PREPARATION FOR OCCUPATIONS IN MEAT PROCESSING. 1972. AGDEX 943. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

190. ORNAMENTAL HORTICULTURE - LANDSCAPING AND TURF MANAGEMENT, FLORICULTURE AND GREENHOUSE MANAGEMENT. 1972. AGDEX 950. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

191. ORNAMENTAL HORTICULTURE AND FLORICULTURE FOR AREA VOCATIONAL CENTERS (Course Outline). 1971. AGDEX 950. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A course designed to prepare students for employment in ornamental horticulture and related occupations. Price: $1.00. Single copy available in limited quantity from source.

192. ORNAMENTAL HORTICULTURE (Student Study Guide). 1971. AGDEX 950. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in a specialized study of ornamental horticulture and floriculture. Price: $1.00. Single copy available in limited quantity from source.

193. USING TASK DATA FOR RECRUITMENT OF WORKERS IN ORNAMENTAL HORTICULTURE: REPORT OF A FIELD TEST. 1972. AGDEX 950. Arthur L. Berbey and William E. Drake. Source: ERIC. Also limited single copies available from A. Berbey, Stone Hall, Cornell University, Ithaca, New York 14850. Procedures and results in using task data for recruitment of workers in ornamental horticulture. Employers recruited workers based on tasks worker would perform on the job. Results include evaluation from employers who did, and did not, use the

task checklists for recruiting workers. Price: Reference ERIC rates. Single copies from A. Berkey at mailing costs and until supply is exhausted.

194. AN ANALYSIS OF TASKS PERFORMED IN THE ORNAMENTAL HORTICULTURE INDUSTRY. 1972. AGDEX 950. Arthur L. Berkey and William E. Drake. Source: ERIC. Cornell Instructional Materials Service, Stone Hall, Ithaca, New York 14850. Detailed task data for nine business areas in ornamental horticulture in New York State. Includes functions executed in each business area, tasks performed to fulfill each function, conditions under which tasks are performed and acceptable level of task performance for individual tasks. Price: $2.00 postpaid from Cornell IMS. Reference ERIC rates. Available in quantity from source. Copy submitted to ERIC system.

195. FOCUSING ON HORTICULTURE. 1972. AGDEX 950. R. W. Walker and M. Thornton. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. Kit contains a 62-frame slidefilm, a 10-minute tape narration, a teacher's guide, and 25 copies of a student brochure "We Want You." This series depicts career opportunities in ornamental horticulture and is intended for use with junior high or high school students. Price: Complete kit, $6.25; additional student brochures, $2.50 per 100. All prices postpaid when payment accompanies the order. Available in quantity from source.

196. ORNAMENTAL HORTICULTURE - GREENHOUSE MANAGEMENT. 1972. AGDEX 952. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

197. BUSINESS PRINCIPLES OF LANDSCAPE SERVICE ORGANIZATIONS. 1972. AGDEX 953. Ronald C. Kowalka. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A description of the organization of a landscape service including the business forms used to complete a landscaping job from the first call through the billing procedure for final payment. A problem to provide students with practice is included. Teacher's manual supplies the answers to the practice problem. Price: Student Manual, $2.50. Teacher's Manual, $1.00. Available in quantity from source. Copy submitted to ERIC system.

198. NEW JERSEY MANPOWER NEEDS IN NATURAL RESOURCES AND/OR AGRICULTURE. 1972. AGDEX 960. Charles C. Drawbaugh and Richard H. Merritt. Source: Rutgers University, New Brunswick, New Jersey 08903. Department of Vocational-Technical Education. The publication has over 200 pages of baseline data on natural resources and/or agricultural occupations. Includes opportunities for more than 275 jobs listed by job title. Lists educational training level proposed by employers for most of the jobs. The publication is much more than a research piece. The clustering of occupational areas, wages of workers in the various jobs and education level necessary for entry level are more important considerations in generating curriculum. It could be a guide for other states in determining manpower needs. Price: $3.00. Not available from source.

199. NATURAL RESOURCES (Student Study Guide). 1971. AGDEX 960. Agribusiness Education Supervisory Staff. Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A student study guide for 11th and 12th grade students interested in a specialized study of conserving and using our natural resources along with developing land for recreational purposes. Price: $1.00. Single copy available in limited quantity from source.

200. OUTDOOR WINTER RECREATION, 1972. AGDEX 961. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

Conservation Aide. 1972. AGDEX 963. John Hillison. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A series of five publications designed for the student placed with the local Soil and Water Conservation office. The publications contain technical information and guide the students to other references contained in the local Soil and Water Conservation office. They also provide the student with practical exercises with space provided for student response. Thus, the publications serve as both a reference and workbook. The publications were developed by Mr. Hillison with the aid of local, state, and federal Soil Conservation Service and Soil and Water Conservation District personnel. Individual publications may have application in other parts of the Agricultural Education program. The individual publications are priced individually. Available in quantity from source. Copy submitted to ERIC system. The publication titles are as follows:

201. I. SOIL AND WATER CONSERVATION: WHAT, WHY, AND HOW. Price: $.50.

202. II. DEFINING SOILS AND WATERSHEDS. Price: $.75.

203. III. WHAT ARE THE RESPONSIBILITIES OF A SOIL AND WATER DISTRICT EMPLOYEE. Price: $1.10.

204. IV. SURVEYING. Price: $1.25.

205. V. ENGINEERING CONSERVATION STRUCTURES AND PRACTICES. Price: $1.00.

206. EROSION, SEDIMENTATION, AND ENVIRONMENTAL QUALITY (Slidefilm 1105). 1972. AGDEX 963. W. R. Oschwald. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 37 frames. It is accompanied by a script or study guide. Numerous ways of controlling erosion and sediment problems are discussed. By working together, we can develop and implement plans that will help everyone enjoy the benefits of our soil and water resources more fully. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $3.00; cassette tape narration of script, $3.00. Additional copies of study guide, $.20 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

207. PLANT NUTRIENTS IN THE ENVIRONMENT (Slidefilm 1106) 1972. AGDEX 963. W. R. Oschwald, B. B. Tucker, and R. D. Voss. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 33 frames. It is accompanied by a script or study guide. Various ways of reducing nutrient losses and their effect on the environment are discussed. It was prepared primarily for use with nonfarm audiences to acquaint them with food production problems and possible solutions as they relate to the environment. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with study guide, $2.65; cassette tape narration

of script, $3.00; additional copies of study guide, $.20 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

208. PREPARATION FOR OCCUPATIONS IN FORESTRY. 1972. AGDEX 970. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

209. FORESTRY (Student Study Guide). 1971. AGDEX 970. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A student study guide for 11th and 12th grade students interested in a specialized study of general forestry and pulpwood production. Price: $1.00. Single copy available in limited quantity from source.

210. FORESTRY PRODUCTION AND MARKETING FOR AREA VOCATIONAL CENTERS (Course Outline). 1971. AGDEX 970. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A course outline to acquaint students with the subject matter and learning activities concerned with the management of trees grown as a crop. Other aspects are production, logging, wood utilization, recreation, and special products. Price: $1.00. Single copy available in limited quantity from source.

211. TEACHERS' HANDBOOK FOR PRE-EMPLOYMENT LABORATORY TRAINING PROGRAMS IN HARVESTING FORESTRY PRODUCTS, No. 108. 1972. AGDEX 970. Edwin Smith, V. A. Teacher Cleveland; Giles Horn, V. A. Teacher, Kirbyville; and Colvin Walker, Subject Matter Specialist, V.I.S. Source: Vocational Instructional Services, F. E. Box 182, Texas A & M University, College Station, Texas 77843. Contains 392 pages of technical information, including 156 illustrations for transparency masters. Includes topics in Forest Environment, Reforestation, applied Silviculture, Forest Tree Identification, Forest Protection, Timber Harvesting, Forest Products Utilization, Forest Management and Economics, Business Methods Relating to Forestry and others. Price: $12.00. Available in quantity from source.

212. CONSERVATION - AIR. 1972. AGDEX 980. Wisconsin Teacher Educator staffs, State Consultant staff, and Vo-Ag Instructors. Source: F. J. Doering, Head Consultant, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702. Price: No charge. Available in limited quantity from source.

213. AGRICULTURE AND THE ENVIRONMENT (Slidefilm 1101). 1972. AGDEX 980. A. J. Adolfi and R. L. Courson. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 71 frames. It is accompanied by a script or study guide. It discusses changes in technology and how they affect the environment. Possible problems and solutions are discussed on soil erosion, fertilizers, animal wastes, and pesticides. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $3.75; cassette tape narration of script, $3.00; additional copies of study guide, $.25 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

214. GOOD ANIMAL WASTE MANAGEMENT PREVENTS POLLUTION (Slidefilm 1103). 1972. AGDEX 980. D. G. Jedele. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 29 frames. It is accompanied by a script or study guide. Various methods of

handling manure from large livestock enterprises are discussed to avoid pollution problems or nitrate losses. A cassette tape narration of the script is available, as are additional copies of the student study guide. Price: Slidefilm with student study guide, $2.75; cassette tape narration of script, $3.00; additional copies of study guide, $.20 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

215. AGRICULTURE AND THE ECOSYSTEM (Slidefilm 1104) 1972. AGDEX 980. W. R. Boggess and R. D. Walker. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This is a color, single-frame slidefilm of 47 frames. It is accompanied by a script or study guide. It discusses some of the following points: Ecology; Ecosystem; Energy and Nutrient flow; Food Chains: Life Cycles; and Various Ways of Improving Our Environment. Price: Slidefilm with student study guide, $3.35; cassette tape narration of script, $3.00; additional copy of study guide, $.20 each. All prices postpaid when payment accompanies the order. Available in quantity from source.

216. OCCUPATIONAL OPPORTUNITIES IN ENVIRONMENTAL MANAGEMENT. 1972. AGDEX 980. John H. Hillison, David L. Howell, and William S. Farrington. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A student reference prepared as an introduction to the careers available to high school graduates in environmental management. The careers include: wastewater treatment operator, water treatment operator; air pollution inspector; solid waste managers; and soil conservation technician. The unit is designed to provide the student with an awareness of the job opportunities and the nature of the work in the above mentioned occupations. Price: $1.25. Available in quantity from source. Copy submitted to ERIC system.

217. INTRODUCTION TO ENVIRONMENTAL PROTECTION. 1972. AGDEX 980. David L. Howell and Willaim S. Farrington. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A student reference prepared as an introduction for the two year environmental management program in water treatment operation, wastewater treatment operation, and air pollution inspection. However, it is suggested that the unit would be used with high school students interested in pollution problems that are present in our environment and to assist them in determining how these problems may be solved. This unit is not meant as a complete environmental text, but as a source of information to develop student interest in the various areas of environmental protection. Suggested experiments are included to provide students with a greater understanding of the problems that exist in our environment today. Price: $2.00. Available in quantity from source. Copy submitted to ERIC system.

218. SHOP PROJECTS. 1972. AGDEX 981. Curriculum and Instructional Materials Center, Bob Patton. Source: Curriculum and Instructional Materials Center, State Department of Vocational and Technical Education, Stillwater, Oklahoma 74074. Thirty-six shop project illustrations drawn to scale on 11 1/2" x 18" paper includes bill of materials. Price: $3.50. Available in quantity from source.

## AGDEX .10 - .60 PROFESSIONAL

219. A GUIDE FOR PLANNING INSTRUCTION FOR ADULTS IN AGRICULTURAL EDUCATION. 1972. AGDEX .10/30. A. E. Eichelberger, Charlie Thames, Ronald Brown, B. B. Robbins, and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State, State College, Mississippi 39762. Contains information on planning adult programs, including space for such planning of local programs. Price: $1.00. Available in quantity from source.

220. 1971 CENTRAL REGIONAL RESEARCH CONFERENCE REPORT. 1972. AGDEX .10/30. William H. Hamilton, Editor. Source: Agricultural Education Section, Purdue University, Lafayette, Indiana 47907. A report of the annual Central Regional Research Conference held at Purdue University. Price: Free. Available in limited quantity from source.

221. THE PROCESS OF EVALUATING VOCATIONAL EDUCATIONAL PROGRAMS IN AGRICULTURE. 1972. AGDEX .10/33. Harold R. Matteson. Source: Department of Agricultural and Extension Education, University of Wisconsin, Madison, Wisconsin 53700. Available in limited quantity from source.

222. GENERAL FARMING (Student Study Guide). 1971. AGDEX .20/50. Agribusiness Education Supervisory Staff. Source: Supervision Agribusiness Education, 101 Petrie Hall, Auburn, Alabama 36830. A study guide for 11th and 12th grade students interested in a specialized study of general farming. Price: $1.00. Single copy available in limited quantity from source.

223. A GUIDE FOR PLANNING PROGRAMS IN AGRICULTURAL EDUCATION. 1972. AGDEX .20/50. A. E. Eichelberger, Charlie Thames, Ronald Brown, B. B. Robbins, and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer D. X Mississippi State, State College, Mississippi 39762. Contains information for planning instructional programs in agriculture on the secondary level, including analysis of community needs. Price: $1.00. Available in quantity from source.

224. A GUIDE FOR PLANNING INSTRUCTION IN AGRICULTURAL EDUCATION. 1972. AGDEX .20/50. A. E. Eichelberger, Charlie Thames, Ronald Brown, B. B. Robbins, and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State, State College, Mississippi 39762. Contains information on planning instruction on the secondary level, including space for detailed planning by the teacher in the local program. Price: $1.00. Available in quantity from source.

225. A GUIDE FOR TEACHING BASIC AGRICULTURE. 1972. AGDEX .20/50. B. B. Robbins, Ronald Brown, Charlie Thames, A. E. Eichelberger, and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State, State College, Mississippi 39762. Contains an outline for suggested instruction in basic agriculture, recommended references, and examples of student activities. Price: $1.00. Available in quantity from source.

226. A GUIDE FOR TEACHING AGRICULTURAL PRODUCTION. 1972. AGDEX .20/51. Charlie Thames, Ronald Brown, B. B. Robbins, A. E. Eichelberger, and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State, State College, Mississippi 39762. Contains an outline of suggested instruction in agricultural production, recommended references, and examples of student activities. Price: $1.00. Available in quantity from source.

227. INSTRUCTIONAL MATERIALS FOR V. A. IV. PRODUCTION AGRICULTURE, #2004. 1972. AGDEX 910. Center Staff Members. Source: Vocational Instructional Services, F. E. Box 182, Texas A & M University, College Station, Texas 77843. Contains 603 pages of technical information, including 266 illustrations for transparency masters. Includes topics in Animal Science, Soil Science, Agricultural Mechanics, and Agricultural Management for the fourth-year course in production agriculture. Price: $20.00. Available in quantity from source.

228. BASIC CORE CURRICULUM FOR VOCATIONAL AGRICULTURE III. 1972. AGDEX .20/51. Bob Patton, Curriculum Specialist. Source: Curriculum and Instructional Materials Center, State Department of Vocational and Technical Education, Stillwater, Oklahoma 74074. Units of instruction have been developed to cover 60 percent of a teachers time in teaching basic information in the following areas: Plant and Soil Science, Career Selection, Leadership, Animal Science, Supervised Farm Training, Farm Business Management and Agricultural Mechanics. Each unit of instruction includes behavioral objectives, suggested activities for instructors and students, information sheets, assignment sheets, job sheets, tests, answers to test and transparency masters. Price: $15.00. Available in quantity from source. Copy submitted to ERIC system.

229. A GUIDE FOR TEACHING AGRICULTURAL SUPPLIES/SERVICES. 1972. AGDEX .20/52. Jasper S. Lee, Ronald Brown, Charlie Thames, B. B. Robbins, A. E. Eichelberger. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State, State College, Mississippi 39762. Contains an outline of suggested instruction in agricultural supplies, recommended references, and examples of student activities. Price: $1.00. Available in quantity from source.

230. A GUIDE FOR TEACHING AGRICULTURAL MECHANICS. 1972. AGDEX .20/53. Ronald Brown, Charlie Thames, B. B. Robbins, A. E. Eichelberger, and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State, State College, Mississippi 39762. Contains an outline of suggested instruction in agricultural mechanics, recommended references, and examples of student activities. Price: $1.00. Available in quantity from source.

231. A GUIDE FOR TEACHING ORNAMENTAL HORTICULTURE. 1972. AGDEX .20/55. Ronald Brown, Charlie Thames, B. B. Robbins, A. E. Eichelberger and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State , State College, Mississippi 39762. Contains an outline of suggested instruction in ornamental horticulture, recommended references, and examples of student activities. Price: $1.00. Available in quantity from source.

232. A GUIDE FOR TEACHING AGRICULTURAL RESOURCES. 1972. AGDEX .20/56. B. B. Robbins, Ronald Brown, Charlie Thames, A. E. Eichelberger, and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State, State College, Mississippi 39762. Contains an outline of suggested instruction in agricultural resources, recommended references, and examples of student activities. Price: $1.00. Available in quantity from source.

233. - A GUIDE FOR TEACHING FORESTRY. 1972. AGDEX .20/57. Charlie Thames, Ronald Brown, B. B. Robbins, A. E. Eichelberger, and Jasper S. Lee. Source: Curriculum Coordinating Unit, P. O. Drawer DX, Mississippi State, College State, Mississippi 39762. Contains an outline of suggested instruction in forestry, recommended references, and suggested student activities. Price: $1.00. Available in quantity from source.

234. AGRICULTURAL EDUCATION NOTEBOOK. 1972. Instructional Materials Laboratory. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. An attractive three-ring, two-inch capacity yellow, plastic notebook. This notebook was designed for filing resource materials in the following areas: Agricultural Mechanics, Agricultural Production, Agricultural Products, Agricultural Resources, Agricultural Supplies, Forestry and Ornamental Horticulture. Price: $1.50 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

235. PLANNING FOR SUPERVISED COOPERATIVE EXPERIENCE PROGRAMS IN OFF-FARM AGRICULTURAL OCCUPATIONS. 1972. AGDEX .40/10. Charles Grote, Bob R. Stewart, Gene M. Love. Source: Instructional Materials Laboratory, 8 Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. The handbook prepared for teacher use contains an 18-page narrative and 23 pages of suggested forms for use in planning and conducting supervised occupational experience programs in off-farm agriculture. Price: $1.60 plus postage and handling. Available in quantity from source. Copy submitted to ERIC system.

236. RECORD BOOK FOR COOPERATIVE PART-TRAINING STUDENTS, No. 903. 1970. AGDEX .40/30. State Committee of Teachers and Center Staff. Source: Vocational Instructional Services, F. E. Box 182, Texas A & M University, College Station, Texas 77843. Includes two pages for student's leadership activities, nine pages for the student to use in recording daily work experiences, a page to record wages received, and a page for notes. There is a total of 22 pages (11 sheets) in the book. Price: $.35. Available in quantity from source.

237. SUPERVISED EXPERIENCE PROGRAM RECORD BOOK FOR PRODUCTION AGRICULTURE, No. 916. 1971. AGDEX ..40/30. State Committee of Teachers and Center Staff Members. Source: Vocational Instructional Materials, F. E. Box 182, Texas A & M University, College Station, Texas 77843. Includes pages for leadership activities, inventory pages, expense and income pages, business analysis pages, and enterprise analysis pages. A total of 27 pages (17 sheets) for an accurate picture of a student's farming program. Price: $.50. Available in quantity from source.

238. GUIDE TO SUPERVISED EXPERIENCE PROGRAM RECORD BOOK FOR PRODUCTION AGRICULTURE, No. 917. 1971. AGDEX .40/30. State Committee of Teachers and Center Staff Members. Source: Vocational Instructional Services, F. E. Box 182, Texas A & M University College Station, Texas 77843. Detailed explanation of how to use the "Supervised Experience Program Record Book for Production Agriculture," No. 916. Contains complete sample record book with example enterprise entries and total farming program. 40 pages. Price: $.60. Available in quantity from source.

239. STARTING TO KEEP RECORDS (Slidefilm 350A). Revised 1972. AGDEX .40/30. J. H. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 56-frame color slidefilm uses illustrations from a student record book, "Records of My Supervised Experience Program," to illustrate the setting up of records. Although the record book illustrated is for Illinois, the same general principles will likely apply to record books used in other states. Price: $3.40 postpaid when payment accompanies the order. Available in quantity from source.

240. KEEPING RECORDS UP TO DATE (Slidefilm 351A). Revised 1972. AGDEX .40/30. J. H. Herbst. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. This 57-frame color slidefilm uses illustrations from a student record book, "Records of My Supervised Experience Program" to illustrate the keeping of records from day to day. Although the record book illustrated is for Illinois, the same principles will likely apply to record books used in other states. Price: $3.45 postpaid when payment accompanies the order. Available in quantity from source.

Cumulative Record Book Series for FFA Foundation Awards. 1972. AGDEX .40/50. Source: Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois 61801. These record books are for student use with supervised experience programs. Each book is 20 pages in length and is intended primarily as a record of plans and accomplishments to be submitted with an application for the FFA Foundation award in its particular area. Price: $.15 each, postpaid when payment accompanies the order. Available in quantity from source.

241. FISH AND WILDLIFE MANAGEMENT.

242. FORESTRY MANAGEMENT.

243. OUTDOOR RECREATION.

244. PRODUCT PROCESSING.

245. LEADERSHIP I UNIT. 1971. AGDEX .50/10. Vernon Haskins and Bob R. Stewart. Source: Instructional Materials Laboratory, & Industrial Education, University of Missouri-Columbia, Columbia, Missouri 65201. A 75-page unit on leadership developed for teacher use. Included are student handouts and 40 transparency masters. Price: To be announced. Available in quantity from source. Copy submitted to ERIC system.

246. MEMBERSHIP - THE PATHWAY TO LEADERSHIP. 1972. AGDEX .50/10. L. H. Newcomb. Source: Ohio Agricultural Education Curriculum Materials Service, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A student reference designed for all students of vocational agriculture. This is the first of a series of curriculum materials designed to instill in all students, not just officers, the fundamental leadership competencies which need to be developed during high school years for use in later life. This unit considers the reasons for belonging to organizations, history of the FFA, organization of the FFA, benefits of belonging, importance of taking part, and assuming responsibility. Price: $.25. Available in quantity from source. Copy submitted to ERIC system.